



## OLR BACKGROUNDER: THE STATE EMPLOYEES RETIREMENT SYSTEM

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### SERS & SEBAC

[CGS § 5-278](#) requires that any changes to SERS be collectively bargained between the state and the State Employee Bargaining Agents Coalition (SEBAC). The Office of Policy and Management's Office of Labor Relations represents the state in negotiations.

The state and SEBAC have negotiated changes to SERS in agreements known as:

- SEBAC I (a 1989 arbitration decision),
- SEBAC II (1992),
- SEBAC III (1992),
- SEBAC IV (1995),
- SEBAC V (1997),
- SEBAC 2009, and
- SEBAC 2011.

The current agreement (SEBAC 2011) is effective through June 30, 2022. To learn more about SEBAC 2011, see OLR Report [2012-R-0032](#).

### ISSUE

This report describes the State Employees Retirement System (SERS), including a comparison of the system's membership tiers and a summary of how it is funded, its funding status, and the factors behind its unfunded liability. It updates OLR Report [2010-R-0454](#). Unless otherwise noted, the funding figures in this report are drawn from the [2014 actuarial valuation](#) of SERS. (According to the Office of the State Comptroller, the valuation scheduled for release in November 2016 has been postponed. We will update this report with the new figures once they are available.)

### SUMMARY

SERS is the pension system for the large majority of state employees. It is a defined benefit pension plan administered by the [Office of the State Comptroller](#) and the [State Employees Retirement Commission](#).

Most state employees covered by SERS fall into one of four different membership tiers based on when they began working for the state. Tier I

covers employees hired on or before July 1, 1984; Tier II covers employees hired from July 2, 1984 through June 30, 1997; Tier IIA covers employees hired from July 1, 1997 through June 30, 2011; and Tier III covers employees hired on or after July 1, 2011. Each tier has different terms for its eligibility requirements and



pension benefits, but in general, the creation of each successive tier helped reduce the cost of providing pension benefits by reducing benefits or creating more stringent eligibility requirements for the new tier's members.

According to the 2014 actuarial valuation, SERS will eventually have to pay a total of \$25.5 billion in pension benefits for its members. Roughly 70% of this total liability is to pay benefits to those who retired before June 30, 2014. To meet that obligation, the system has \$10.6 billion in actuarially valued assets, leaving \$14.9 billion in benefits that the state will eventually have to pay, but for which it has not yet put any funds aside. These unfunded benefits are called the unfunded actuarial accrued liability (UAAL).

SERS is funded with contributions from the state and employees, plus any investment returns (or minus any losses) generated by the pension fund's assets. The state's annual contribution to the system has two parts: (1) the "normal cost" (the amount needed to pre-fund the benefits earned by active employees that year) and (2) an amortized payment to reduce the system's UAAL. For FY 17, the state should contribute \$1.6 billion to SERS; \$287 million of this amount (18%) is for the normal cost and \$1.3 billion (82%) is for the UAAL.

In November 2015, Boston College's Center for Retirement Research (CRR) issued a [report](#) pursuant to a state grant issued through the Office of Policy and Management's [initiative](#) to identify historic weaknesses in funding the system and recommend improvements. According to the report, SERS' UAAL stems from a combination of:

1. unfunded liabilities created when, from the late 1930s through the early 1970s, the state promised its employees retirement benefits but did not pre-fund their benefits by putting aside money while the employees were working;
2. the years, from the early 1970s through the mid-1980s and numerous other years since then, that the state did not make the full amortization payment needed to keep the initial UAAL from growing;
3. years when actuarial estimates underestimated the system's future liability (particularly because of early retirement incentive programs (ERIPs) that caused retirement patterns to deviate from those used in actuarial assumptions); and
4. years when the system's actual investment returns underperformed its assumed returns.

## SERS TIERS

Most SERS members belong to one of four different tiers, depending on when they began working for the state. (SERS also has a defined contribution Alternative Retirement Plan and a hybrid plan that are available only to certain Higher Education employees.) Table 1 below compares various aspects of the four tiers' pension benefits. Among other things, it shows that each successive tier was created with reduced benefits or more stringent eligibility requirements for its members and as a result, the state's normal cost decreases as a percentage of member payroll with each successive tier. For example:

- Tier I has the most generous benefits and lowest age and service eligibility requirements;
- Tier II has more modest benefits and increased age and service requirements, but no employee contributions for non-hazardous duty members;
- Tier IIA requires employee contributions from all of its members; and
- Tier III has increased age and service requirements for hazardous duty members and uses a longer time frame to determine a member's final average salary, which could lead to reduced benefits.

**Table 1: Comparison of SERS Provisions by Tier**

<b>Plan Component</b>	<b>Tier I</b>	<b>Tier II</b>	<b>Tier IIA</b>	<b>Tier III</b>
<b>State Employee Members</b>	Hired on or before July 1, 1984	Hired from July 2, 1984 through June 30, 1997	Hired from July 1, 1997 through June 30, 2011	Hired on or after July 1, 2011
<b>Vesting Period</b>	10 years of service with continuous state employment for the last 5	5 years "actual" state service or 10 years of "vesting" state service	Same as Tier II	10 years of "vesting" state service
<b>Employee Contribution</b>	Regular: 2% Hazardous Duty: 4%	Regular: 0% Hazardous Duty: 4%	Regular: 2% Hazardous Duty: 5%	Regular: 2% Hazardous Duty: 5%
<b>Retirement Eligibility (Age/ Years of Service)</b>	Normal: 55/25 or 65/10 Age 70: 70/5 Early: 55/10 Hazardous Duty: Any/20	*Normal: 60/25 or 62/10 Age 70: 70/5 Early: 55/10 Hazardous Duty: Any/20	*Same as Tier II	Normal: 63/25 or 65/10 Age 70: 70/5 Early: 58/10 Hazardous Duty: 50/20 or Any/25
<b>Final Average Salary (FAS) Used to Determine Pension Benefit</b>	3 highest paid years	Same as Tier I	Same as Tier I	5 highest paid years

Table 1 (continued)

<i>Plan Component</i>	<i>Tier I</i>	<i>Tier II</i>	<i>Tier IIA</i>	<i>Tier III</i>
<b>Hazardous Duty Benefit Formula</b>	(50% FAS) + (2% FAS x years of service over 20)	Same as Tier I	Same as Tier I	Same as Tier I
<b>Regular Benefit Formula</b>	2% FAS x years of service	1.4% FAS up to breakpoint** + 1.83% FAS above breakpoint x years of service up to 35 + 1.625% FAS x years of service over 35	Same as Tier II	Same as Tier II

Sources: Office of the State Comptroller (<http://www.osc.ct.gov/empret/stateretire.htm>)

\*Under SEBAC 2011, eligibility requirements for Tier II and IIA members who retire on or after July 1, 2022 will be 63/25 or 65/10 unless the member chose to pay the full actuarial cost of maintaining the lower eligibility requirements.

\*\*Negotiations following SEBAC 2011 changed the benefit formula for members of Tiers II, IIA, and III who retire on or after July 1, 2013. The formula for members who retired before then was 1.33% FAS + 0.5% FAS above breakpoint x years of service up to 35 + 1.625% FAS x years for service over 35.

### ***Pension Benefit Differs Based on Tier***

Table 2 illustrates how the differences between tiers affect retirement benefits and costs. In this example, we assume: (1) a non-hazardous duty state employee is retiring at age 65 after 25 years of continuous state service; (2) the employee earned \$70,000, \$75,000, \$80,000, \$80,000, and \$80,000 in each of her last five years of work; and (3) the applicable breakpoint is \$77,800 (as it is in 2016).

**Table 2: Example of Pension Benefit Difference between SERS Tiers**

<i>Benefit Formula</i>	<i>Tier I</i>	<i>Tier II</i>	<i>Tier IIA</i>	<i>Tier III</i>
<b>Benefit Formula</b>	2% FAS x years of service	1.4% FAS up to breakpoint + 1.83% FAS above breakpoint x years of service up to 35 + 1.625% FAS x years of service over 35	Same as Tier II	Same as Tier II

Table 2 (continued)

	<i>Tier I</i>	<i>Tier II</i>	<i>Tier IIA</i>	<i>Tier III</i>
<b>FAS</b>	\$80,000 (avg. of 3 highest earning years)	\$80,000 (avg. of 3 highest earning years)	\$80,000 (avg. of 3 highest earning years)	\$77,000 (avg. of 5 highest earning years)
<b>Calculation</b>	.02 x 80,000 x 25	.014 x 77,800 + .0183 x 2,200 x 25	Same as Tier II	.014 x 77,000 + 0 x 25
<b>Annual Pension</b>	\$40,000	\$28,236.50	\$28,236.50*	\$26,950*
<b>State Normal Cost as % of member payroll**</b>	13.79%	9.31%	5.24%	2.57%

\*Unlike Tier II members, non-hazardous duty Tiers IIA and III members also contribute 2% of their pay to the system.

\*\* According to the 2014 valuation

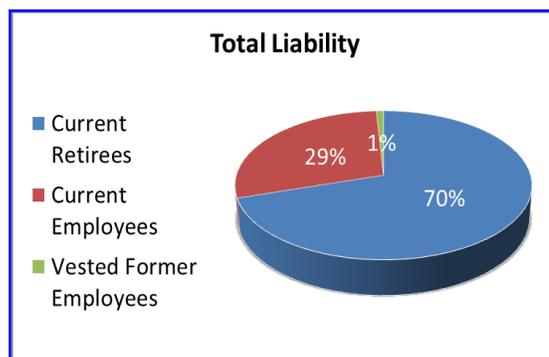
## FUNDING SERS

SERS is funded through a combination of contributions from the state and employees, together with any investment returns generated by the pension fund's assets. As Table 1 shows, most employees contribute 2% of their salary to the fund, although hazardous duty employees contribute 4% or 5% of their salary, depending on their tier, and non-hazardous duty employees in Tier II make no contributions.

The annual amount that the state must deposit into the fund to ensure that all future pension obligations can be met is called the actuarially determined employer contribution (ADEC). It consists of two parts: (1) the "employer normal cost" (the amount needed to pre-fund benefits for active employees, less employee contributions) and (2) an amortized payment for the UAAL.

### Total Liability

According to its 2014 actuarial valuation, as of June 1, 2014, SERS had a total actuarial accrued liability of roughly \$25.5 billion. This represents the estimated total amount that will have to be paid to current retirees, active (i.e., current) state employees, and vested former employees who have not yet begun collecting benefits, over the course of their



(and their beneficiaries') lives. The breakdown of the total liability for the three groups is as follows:

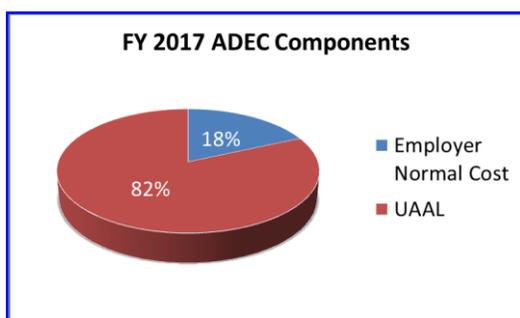
- Current retirees: \$17.9 billion,
- Current employees: \$7.4 billion, and
- Vested former employees: \$0.2 billion.

### **UAAL**

According to the 2014 valuation, SERS has only \$10.6 billion in actuarially valued assets to meet its \$25.5 billion total liability. Thus, \$14.9 billion remains as the UAAL and the system has a 41.5% "funding ratio."

### **Actuarially Determined Employer Contribution (ADEC)**

According to the valuation, the state's ADEC for FY 17 will be \$1.6 billion. Of this amount \$287 million is the employer normal cost and \$1.3 billion is the amortized payment for the unfunded liabilities.



The current amortization schedule requires the state's amortized payments for the unfunded liability to increase each year until they reach almost \$2.8 billion in 2030 (assuming nothing else increases the unfunded liability during that time). After that point, the unfunded liability will have been eliminated and the state's ADEC

should only be its employer normal cost.

### **CAUSES OF THE UNFUNDED LIABILITY**

According to the November 2015 [report](#) by Boston College's [CRR](#), the system's UAAL stems from legacy costs, inadequate contributions, actuarial experience, and investment returns. The report's analysis of each factor is discussed below. (The report based its analysis on the 2014 actuarial valuation of SERS.)

#### **Legacy Costs**

The state began promising its employees pensions in the late 1930s, but it was not until the early 1970s that it began pre-funding their benefits by putting aside money while the employees were working so that it could produce investment returns. Before the early 1970s the state simply paid retirement benefits as they

became due, on a pay-as-you-go basis. These unfunded benefits are the basis of the system's unfunded liability and still account for about \$5.2 billion (35%) of the current total unfunded liability.

### ***Inadequate Contributions***

Even though the state began pre-funding its pension system in the early 1970s, until 1985 it used a phased-in payment schedule that did not require it to pay the full amortization payment needed to keep the initial unfunded liability from growing. The state made the full amortization payments in the late 1980s, which kept the unfunded liability from growing. But in the 1990s it negotiated a series of collective bargaining agreements with SEBAC that allowed the state to underpay throughout most of the decade, causing the unfunded liability to increase significantly. In 2009, the state and SEBAC negotiated another agreement that allowed the state to underpay in 2009 and 2010.

In addition, in the SEBAC IV (1995) and SEBAC V (1997) agreements, the state and SEBAC agreed to change the method of amortizing the unfunded liability from the level-dollar method to the level-percent-of-payroll method starting in 2000. This switch reduced the state's required amortization payments to a level that was significantly less than what was needed to keep the unfunded liability from growing over the early 2000's, but requires the state to drastically increase its payments in the 2010's and 2020's to make up the difference.

According to CRR, since 1985, the state's underpayments have accounted for \$3.2 billion in unfunded liabilities and the switch to the level-percent-of-payroll amortization method has accounted for an additional \$2.3 billion in unfunded liabilities.

### ***Actuarial Experience***

When estimating the pension system's unfunded liability and how much the state should contribute, actuaries make certain assumptions (e.g., retirement rates and ages, life expectancies) to forecast how much funding will be going in and out of the system in the future. While these assumptions are not expected to be exactly correct in any given year, they should be generally accurate over the long term. However, according to CRR, actuarial experience (the difference between actuarial assumptions and reality) has accounted for \$4.1 billion in unfunded liabilities since 1985.

The report suggests that a central reason that the actuarial assumptions have differed from reality is the ERIPs the state used to help address budget crises in 1989, 1992, 1997, 2003, and 2009. The ERIPs helped the budget by reducing

payroll. They added to SERS' unfunded liability, however, by allowing retiring employees to collect benefits sooner, and for a longer duration, than had been anticipated while simultaneously reducing the number of years over which the employees and the state pre-funded their benefits.

### ***Investment Returns***

Actuaries also make certain assumptions about the pension fund's future investment returns. When the returns exceed these assumptions the unfunded liability decreases, but when the returns underperform the unfunded liability increases and the state must ultimately make up the difference.

From 1983 to 2000, SERS' investment returns were almost 3% above its 8.5% assumed return rate, which reduced the unfunded liabilities by \$1.9 billion. However, from 2001 through 2014, average returns were more than 2.5% below the assumed return rate (which was lowered from 8.5% to 8.25% in 2008 and to its current rate of 8.0% in 2012). According to CRR, these underperforming returns added \$3.2 billion in unfunded liabilities.

All told, underperforming investment returns have generated \$1.3 billion in unfunded pension fund liabilities. According to CRR, if returns remain at 5.5% rather than 8% into the future, SERS' UAAL will continue to increase, and in turn, drastically increase the state's annual ADEC to more than \$6.7 billion by the end of the amortization period.

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